



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/723,127	11/25/2003	Salman Akram	020083.1	9440

22823 7590 10/06/2005

STEPHEN A GRATTON
THE LAW OFFICE OF STEVE GRATTON
2764 SOUTH BRAUN WAY
LAKEWOOD, CO 80228

EXAMINER

TRINH, MICHAEL MANH

ART UNIT	PAPER NUMBER
----------	--------------

2822

DATE MAILED: 10/06/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/723,127

Applicant(s)

AKRAM ET AL.

Examiner

Michael Trinh

Art Unit

2822

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 18 July 2005.
2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 26-50 is/are pending in the application.
4a) Of the above claim(s) _____ is/are withdrawn from consideration.
5) ☒ Claim(s) 26-47 and 50 is/are allowed.
6) ☒ Claim(s) 48 and 49 is/are rejected.
7) ☐ Claim(s) _____ is/are objected to.
8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6-22-2005.
4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

*** This office action is in response to Applicant's Amendment filed on July 18, 2005. Claims 26-50 are pending.

*** The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

Claim Rejections - 35 USC § 103

1. Claims 48-49 are rejected under 35 U.S.C. 103(a) as being unpatentable over List et al (6706584) taken with Kubacki (6,794,098).

List teaches a method for forming a semiconductor component with on board capacitor comprising: providing a semiconductor die (Figs 1-2; col 2, line 55 through col 3); forming a first redistribution layer 18 on the die (Fig 3A; col 4, lines 1-39); forming a first portion of the first redistribution layer into a first electrode 18 (Figs 1-2); forming a dielectric layer 16 on the first electrode 18 (Figs 1-2); forming a second redistribution layer 14 on the die (Figs 3B-3E, 1-2); and forming a second portion of the second redistribution layer into a second electrode 14 on the dielectric layer 16; forming a protective layer 12 on the die encapsulating the first electrode 18, the dielectric layer 12, and the second electrode 14 (Figs 1, 3F-3H; col 3, lines 34-38; col 5, lines 5-15); and forming a terminal contact 84 on the die in electrical communication with the second electrode 14 (Fig 1; col 3, lines 20-57).

List lacks having the semiconductor die in a semiconductor wafer.

However, Kubacki teaches employing a large semiconductor wafer for forming a plurality of semiconductor die at the same time, and thereafter singulating to separate the die from the wafer (Fig 5; paragraphs 0061-0063).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to form the semiconductor component of List by employing the semiconductor wafer for forming a plurality of semiconductor die by singulating as taught by Kubacki. This is because of the desirability to form a plurality of discrete semiconductor die at the same time so as to reduce processing time and production cost.

Art Unit: 2822

Allowable Subject Matter

2. Claims 26-47,50 are allowed for reasons as already of record.

Response to Amendment

3. Applicant's remarks filed July 18, 2005 about amended claims 48-49 have been fully considered but are moot in view of the new ground(s) of rejection.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

*** Any inquiry concerning this communication or earlier communications from the examiner should be directed to Michael M. Trinh whose telephone number is (571) 272- 1847. The examiner can normally be reached on M-F: 8:30 Am to 5:00 Pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Amir Zarabian can be reached on (571) 272-1852. The fax phone number is (571) 273-8300

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

Oacs-16



Michael Trinh
Primary Examiner